## **National Wildland Significant Fire Potential Outlook**



# National Interagency Fire Center Predictive Services

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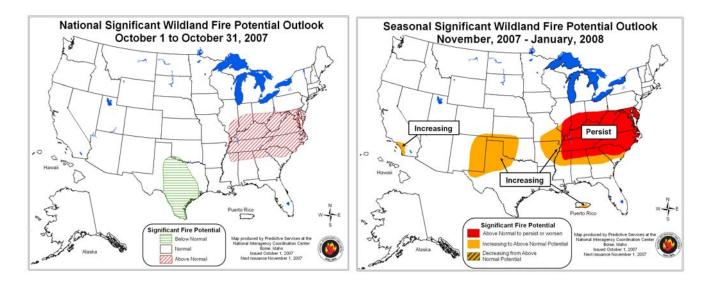


## Wildland Fire Outlook - October through January 2008

Significant fire potential in October is expected to be above average from the Ohio River and Tennessee Valley eastward to the Mid-Atlantic States. Below normal fire potential in October is forecast for portions of central and southern Texas. Significant fire potential will increase or persist as above normal for the November through January period in portions of the southern California coastal area, eastern New Mexico, northwest Texas, western Oklahoma and from the Mississippi Valley to the Mid-Atlantic States.

The main factors influencing fire potential this outlook period are:

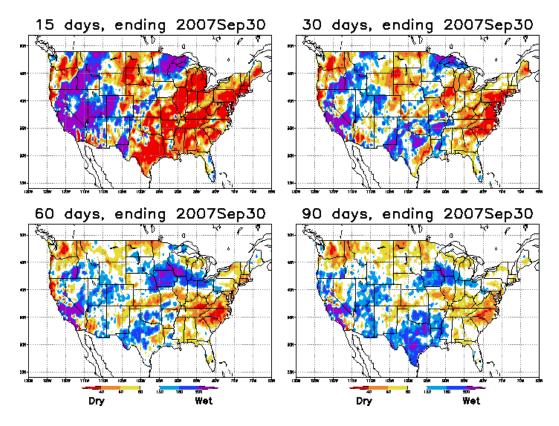
- Current and projected rainfall deficits, continued drought conditions, periods of low relative humidity and elevated fire danger indices are contributing factors to an expected active fall fire season in the east-central portion of the country.
- Dry fuels, windy conditions and abundant grass fuel loadings across the eastern plains of New Mexico, Texas and western Oklahoma are expected to increase fire potential during late fall and early winter.
- Fuels in portions of southern California continue to be abnormally dry and may see increasing fire potential, especially during any offshore wind events, later in the outlook period.



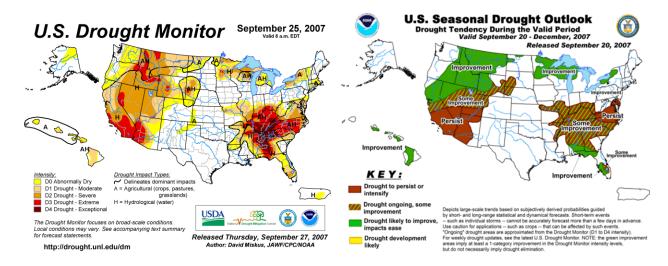
Note: Significant fire potential is defined as the likelihood that a wildland fire event will require mobilization of additional resources from outside the area in which the fire situation originates.

## **Past Weather and Drought**

Significant rainfall occurred between September 19-24 over portions of California, Idaho and Montana. Rainfall was also noted over the western Great Lakes and portions of the Southeast. Unfortunately, dry conditions remain in an area stretching from Mid-Atlantic States west to the Mississippi River. Drought conditions are expected to persist in the Southwest but show some slight improvement in the Southeast.



www.cdc.noaa.gov/Drought/images/prec4.gif



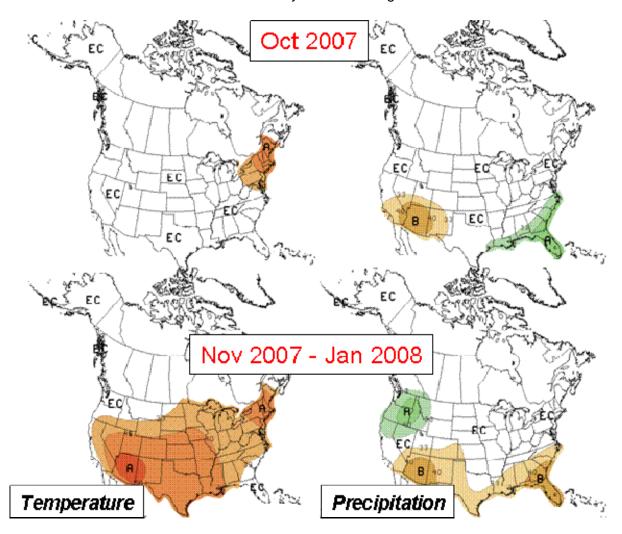
www.drought.unl.edu/dm/monitor.html

#### **Weather and Climate Outlooks**

According to the National Weather Service (NWS) Climate Prediction Center, La Niña conditions (tropical Pacific sea surface temperatures cooler than normal) have developed and are expected to strengthen over the next few months. While La Niña is not expected to influence the weather in October, the November through January outlooks shown below reflect the typical precipitation impacts of La Niña.

The NWS outlook for October calls for warm weather in the Northeast. It should be wetter than normal along the Southeast Coast with drier than normal weather in the Southwest.

November through January is expected to be warmer than normal across most of the country. The Northwest should be wetter than normal with dry weather along the southern tier of states



A = Above normal, B = Below normal, N = Normal, EC = Equal Chances of Above/Below/Normal. www.cpc.ncep.noaa.gov/products/predictions/multi\_season/13\_seasonal\_outlooks/color/page2.gif

### **Area Discussions**

Alaska: Normal significant fire potential is projected for both the month of October and the extended outlook period. While warmer and drier than normal conditions are forecast for the first part of October, fire activity on older, existing fires has been minimal and is not expected to increase. Some areas of the eastern Upper Yukon Valley continue to have dry fuels. These conditions are not likely to persist much longer, but may be a concern next spring depending on the precipitation prior to freeze-up and through the winter. October typically sees the onset of winter snow cover throughout most of the state.

<u>Southwest:</u> Normal fire potential is expect during October Area-wide. However fire potential is expected to increase across portions of the eastern plains in New Mexico and Texas during the extended outlook period primarily due to abundant grass fuel loadings that developed over the past 6 months as an outcome of a very wet spring and early summer. Overall, a dry weather pattern is forecast for October and is expected to extend into early winter with an occasional storm system providing snowy, colder weather across northern sections of the region. Some arctic air intrusions are possible mainly in the eastern half of the region. Down-slope wind events, combined with abundant fine fuels, are expected to increase fire potential across the eastern plains late fall and early winter.

<u>Northern Rockies:</u> Normal significant fire potential is expected for October through the extended forecast period for all of the Northern Rockies; however, heavy fine fuel loadings will continue to present the potential for short-lived, wind driven grass fires in the eastern portion of the Area. Weak La Nina conditions are forecast to start impacting weather in November, which could mean wetter than average conditions with sufficient mountain snow and valley rains.

<u>Great Basin:</u> Significant fire potential is expected to be normal for the Great Basin during October and the extended outlook period. Most of the persistent, long duration large fires in central Idaho are in the process of demobilization. Long-range patterns appear to support cold, wet troughs passing through the Area every 4-7 days during early October, keeping fuel moistures high and adding snow, especially in higher elevation timbered areas. The combination of shorter days, higher relative humidity, and lower daily temperatures, will all help to mitigate the potential for large fire growth in flashy fuels.

<u>Northwest:</u> Normal fire potential is projected for the Area during October and the extended outlook period. The current large wildfire threat is low. Relatively widespread precipitation the latter part of September helped to moisten fuels and lower fire danger indices to levels typical of late September. Continued rainy and cool weather is expected in early October. Longer range forecast models suggest wetter than average conditions during the fall period. Given the current and forecasted conditions, resurgence of high fire danger is very unlikely. Consequently, the Area is expected to see low large fire risk for the remainder of the year.

<u>California:</u> Significant fire potential is expected to be near normal Area-wide during October. Recent precipitation, lower temperatures and higher humidity have moderated fire potential across most of northern California, however the potential for active fire behavior continues, especially with north wind events. Moderating conditions will increase the opportunity for prescribed burning across northern California during October. Fuels in portions of southern California continue to be abnormally dry, but improvement is likely especially across central California. Near-normal weather is expected in October with warmer and drier than normal conditions returning to southern California in the fall. Thus, portions of southern California may see increasing fire potential, especially during any offshore wind events, later in the outlook period.

Rocky Mountain: Normal fire potential is forecast for the entire Area for October through January. While the Area has experienced an average number of fire starts this season so far, fewer than 40% of 10-year average acres have burned. Recent rainfall and cooler weather has reduced large fire potential. Consequently, fall prescribed burning has begun and will continue through October. It is likely the Geographic Area will see typical short-lived lower elevation fires this fall during dry, windy periods.

Eastern Area: Significant fire potential is expected to be above normal across West Virginia, Maryland, Delaware and the southern portions of Missouri, Ohio, Indiana and Illinois during October. Rainfall deficits, continued drought conditions, and elevated fire danger indices are contributing factors in these areas as the fall fire season begins. Precipitation events across the Great Lakes during September helped to mitigate long-term drought conditions, lower fire danger indices, and reduce fire potential. Normal significant fire potential is projected across the remainder of the Eastern Area during the outlook period, however short periods of elevated fire potential are possible given any prolonged warm and dry periods.

<u>Southern Area:</u> In spite of some recent precipitation across portions of the central, south and Mid-Atlantic States, drought conditions remain extreme. Drought conditions across most of these areas are forecast to slightly improve between late September and December. However, the worst drought conditions are expected to persist across most of North Carolina and Virginia. An active fall fire season (late October into November) is expected, especially in Virginia, North Carolina, and the eastern portions of Tennessee and Kentucky. Fire potential across north Texas and western Oklahoma is expected to increase during late fall and early winter due to abundant dry fine fuels and windy conditions. In addition, the southeastern half of Puerto Rico will likely see above normal fire potential as the drier winter period approaches due to below normal precipitation anomalies and continued drought.

**Note:** This national outlook and some geographic area assessments are currently available at the NICC and GACC websites. The GACC websites can also be accessed though the NICC webpage at: <a href="http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm">http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm</a>

#### Historic and Predicted Wildland Fires and Acres Burned Data

Based on reported data so far this year, nationally there were 108% of the average numbers of fires, burning approximately 137% of the average acres. The following table displays historical, current and predicted information pertaining to fire statistics.

SEP 30, 2007 Reported Year-To-Date		Average reported for OCT	Projection for October YTD+Forecast	Average Reported YTD OCT 31	Historical Low YTD OCT 31	Year of Low	Historical High YTD OCT 31	Year of High
ALASKA								
Fires	447	6	451	503	308	2006	715	1997
Acres	469,179	34,787	486,573	1,822,709	121,952	1998	6,645,978	2004
NORTHWEST								
Fires	3,581	272	3,853	3,818	2,791	2005	4,716	2001
Acres	786,526	9,793	794,360	436,357	39,658	1997	1,099,430	2002
NORTH OPS								
Fires	3,378	348	3,795	3,951	2,949	2005	4,839	2001
Acres	205,983	26,121	221,656	157,031	19,124	1997	475,404	1999
SOUTH OPS								
Fires	4,425	349	4,844	4,061	3,310	2006	4,740	1999
Acres	346,697	68,260	408,131	232,555	84,747	2001	578,171	2003
NORTHERN ROCKIES								
Fires	3,232	65	3,297	2,992	1,533	1997	4,364	2000
Acres	1,090,341	13,363	1,103,704	412,781	16,235	1997	1,355,841	2000
EAST BASIN								
Fires	2,332	140	2,472	2,425	1,408	1997	3,167	2001
Acres	2,393,662	10,548	2,409,483	556,142	71,341	1997	1,510,704	2000
WEST BASIN								
Fires	775	29	801	921	685	1997	1,248	2006
Acres	895,025	5,237	901,833	546,461	16,890	2003	1,612,902	1999
SOUTHWEST								
Fires	3,340	150	3,490	4,384	3,364	1999	5,808	2000
Acres	264,525	7,110	274,479	410,889	61,074	2001	974,263	2002
ROCKY MOUNTAIN								
Fires	3,105	521	3,626	3,206	1,884	2004	6,050	2003
Acres	142,587	29,609	169,235	231,310	23,750	1998	668,079	2002
EASTERN AREA								
Fires	11,700	735	12,508	13,057	11,444	2000	16,654	1999
Acres	198,768	6,184	205,571	108,333	59,657	1997	182,875	2003
SOUTHERN AREA								
Fires	36,948	2,061	39,421	31,541	13,336	2003	48,324	2000
Acres	1,434,051	26,103	1,478,426	803,663	241,412	2003	2,472,998	2006
NATIONALLY								
Fires	73,263	4,676	78,559	70,858	56,036	2003	89,784	2000
Acres	8,227,344	237,115	8,453,451	5,718,230	2,274,274	1998	9,602,226	2006

The information above was obtained *primarily* from the Incident Management Situation Report from 1998-2007, however, some inaccuracies and inconsistencies have been corrected. Therefore, the data may not reflect other historic records and should *not* be considered for official statistical purposes.

Prepared October 1, 2007 by the National Interagency Coordination Center – Predictive Services Staff